



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VIII

999 18th STREET - SUITE 500
DENVER, COLORADO 80202-2405

OCT 25 1990

Ref: 8HWM-FF

Ms. Susan Nachtrieb, Water Quality Coordinator
City of Westminster
4800 West 92nd Ave
Westminster, CO 80030

Dear Susan:

Thank you for providing EPA with an opportunity to review your proposed soil sampling program in the vicinity of the Woman Creek diversion project. In general, it is EPA's policy to establish specific objectives for data collection and to design a sampling program which will identify the types of data needed, specify how the data will be used, and establish the desired level of certainty for conclusions to be derived from the analytical results. EPA encourages you to collect the quantity and quality of data which will allow you to (1) characterize the types and levels of contamination at the site and (2) quantify the risk to human health and the environment as a result of the proposed construction activities and the resulting diversion. The following comments are provided for your consideration in conducting a program which will achieve these objectives:

1. Although the plan indicates that CDH soil sampling procedure will be used, it also indicates that a composite of 7 samples will be taken in areas which range from 47 to 110 acres. CDH protocol requires a composite of 25 samples in 10 acre areas. A composite of 7 samples in so large an area will not adequately characterize the contamination. EPA recommends that as a minimum, follow CDH's protocol of 25 samples composited in a 10 acre area. This is appropriate as a screening of the area but will not identify hot spots which are likely since the contamination was probably deposited by surface drainage or wind.

2. Since the sampling will be done in a potentially contaminated area, a health and safety plan is required and the persons performing the sampling need to have completed the 40 hour OSHA training.

3. Because of the concern of the potential impacts on human health and the environment as a result of diverting Woman Creek and eventually discharging into Big Dry Creek, EPA recommends that sediment and water samples be collected from Big Dry Creek in order to characterize the baseline condition.

4. Although the method of compositing samples may be adequate for a general characterization, it will not identify discrete hot spots which may be of concern during and after construction. For

this reason, EPA recommends collecting a number of individual samples and analyzing these without compositing. These samples should be located specifically in light of the tentative alignment and potentially contaminated areas as identified by geography and/or aerial survey. This information may also be useful in designing the alignment of the proposed canal.

5. DOE is scheduled to transmit a draft report on November 9, 1990, which contains all known and accumulated data describing, detailing, or defining contamination surrounding the Standley Lake Reservoir and other reservoirs. EPA recommends that the city of Westminster consider the information in this report in the design of their soils sampling program. Although this may result in a two week or more delay in the short term, it may avoid unnecessary or erroneous sampling in the long term. A consideration of historical sampling will help you to determine the locations and types of contaminants you need to sample for.

6. The sampling plan does not indicate that consideration was given to sampling for potential contaminants other than radionuclides which could adversely affect human health or the environment.

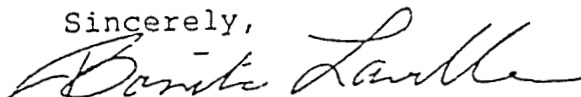
7. The analysis of laboratory blanks and field blanks is an important component of a radioanalytical analysis. Your sampling plan does not indicate that any blanks will be analyzed nor does it indicate the overall QA/QC program.

8. The background concentration of contaminants is an important consideration in determining risk to human health or the environment. Some consideration should be given to the available information on background concentrations. If adequate information is not available, EPA recommends that your sampling program include background samples.

9. In addition, EPA recommends that you consider sampling to depths greater than 1/8" and that you obtain a contaminant profile for these samples.

If you have any concerns or require any clarifications please call me at (303) 294-1165.

Sincerely,



Bonita Lavelle
Remedial Project Manager
Rocky Flats Team